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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,582	09/19/2005	Matthew D Walker	36-1935	1323

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EXAMINER	
HANCE, ROBERT J	

ART UNIT	PAPER NUMBER
4134	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/549,582	WALKER ET AL.	
	Examiner	Art Unit	
	ROBERT HANCE	4134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 September 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 September 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *03/07/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-2, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al., US Pub No 2003/0169932 in view of Aharoni et al., US Patent No 6,014,694.

As to claim 1 Li et al. disclose a method of transmitting data over a network having initially undetermined transmission capacity, in which the data comprise a first part and at least two second parts corresponding to respective different resolutions, for presentation at a receiving terminal simultaneously with the first part, comprising: transmitting at least an initial portion of the first part; choosing among the alternative second parts, as a function of the data indicative of the available transmission capacity; transmitting the chosen second part and any remainder of the first part (Paragraph 32, 42 – first a base layer (a first part) is sent, and this base layer is used to probe the network to see what bandwidth is available. If enough bandwidth is available, one or more enhancement layers (second part(s)) are sent along with the original base layer).

Li et al. fail to explicitly disclose that the data comprise at least two alternative second parts, nor do they disclose receiving data indicative of the available

transmission capacity. However, in an analogous art, Aharoni et al. disclose choosing from multiple alternative levels of video quality depending on bandwidth available (col. 8 lines 3-18, 54-63) and measuring the bandwidth of a network connection by transmitting packets and measuring their rate of reception (col. 13 line 8 – col. 14 line 67). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Aharoni et al. with the teachings of Li et al. The rationale for this combination would have been to an alternative to using base and enhancement layers, and to implement the bandwidth measurement process, as Li et al. state in paragraph 121 that the details of this process are left to implementation. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

As to claim 2, Li et al. disclose determining the available transmission capacity by monitoring the transmission by the network of the said initial portion of the first part (Paragraph 32, 42 – transmission of the base layer is used to determine network capacity).

As to claim 5, Li et al. disclose a method according to claim 1 in which the first part is the base layer data of layered coded video and the second part (s) are one or more enhancement layers of the layered coded video (Paragraphs 32 and 42).

As to claim 7, Li et al. disclose a method of transmitting data over a network having initially undetermined transmission capacity, in which the data comprise a first

part and at least one second part, for presentation at a receiving terminal simultaneously with the first part, comprising: transmitting at least an initial portion of the first part; choosing, as a function of the data indicative of the available transmission capacity, among the options of transmitting no second part, or one or more of the second parts; transmitting the chosen second part (s), if any, and the remainder of the first part (Paragraph 32, 42 – first a base layer (a first part) is sent, and this base layer is used to probe the network to see what bandwidth is available. If enough bandwidth is available, one or more enhancement layers (second part(s)) are sent along with the original base layer).

Li et al. fail to explicitly disclose receiving data indicative of the available transmission capacity. However, in an analogous art, Aharoni et al. disclose measuring the bandwidth of a network connection by transmitting packets and measuring their rate of reception (col. 13 line 8 – col. 14 line 67). See the same motivation for combining two references as in claim 1.

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al., US Pub No 2003/0169932 in view of Aharoni et al., US Patent No 6,014,694 and further in view of Nakamura, JP Patent No JP 09093553A.

As to claim 3, Li et al as modified fail to teach in an initial time period of step (d), transmission of a leading part of the chosen second part of an extent corresponding to the extent of the first part already transmitted is performed preferentially to, or to the exclusion of, further transmission of the first part.

However, Nakamura discloses, in a system that is transmitting audio and video signals, when the two signals become unsynchronized, delaying the transmission of the audio signal until the audio and video signals are in synchronization (Abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply this technique to the system of Li et al. as modified. The rationale for this combination would have been to create a coherent video file in which the base layer and enhancement layers are synchronized. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al., US Pub No 2003/0169932 in view of Aharoni et al., US Patent No 6,014,694 and further in view of Teng et al., US Patent No 6,122,668.

As to claim 4 , Li et al as modified fail to teach a method according to claim 1 in which the first part is data representing an audio signal and the alternative second parts are alternative sets of video data, encoded at respective different compression rates, for presentation simultaneously with the audio data.

Teng et al. disclose transmitting audio and video signals separately over a network connection (col. 2 lines 1-19). It would have been obvious to one of ordinary skill in the art to combine this capability with the separate video portions of alternative quality as disclosed by Li et al. as modified by Aharoni et al. The rationale for this

combination would have been that, since the video is of variable size and quality but the file size and quality of the audio is constant, to use the audio portion to first probe the bandwidth of the network, then later decide which video quality to use. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al., US Pub No 2003/0169932 in view of Aharoni et al., US Patent No 6,014,694 and further in view of Yamamoto, US Patent No 6,810,425.

As to claim 6, Li et al as modified fail to teach a method according to claim 1 in which the first part is text and the alternative second parts are alternative versions, having different resolutions, of a graphical image to be displayed alongside the text.

However, Yamamoto discloses a system in which the resolution of image files being sent over a network depend on the available bandwidth, wherein the bandwidth is measured by the speed in which data is received (col. 3 lines 39-65). It would have been obvious to one of ordinary skill in the art to use images of varying resolution in the system of Li et al. as modified by Aharoni et al. Just as Aharoni et al. disclose storing video files of varying quality (col. 8 lines 54-56), one skilled in the art would have readily adapted the teachings of Yamamoto to first create and store a plurality of image files of differing resolutions, then sending the file that best matches the available bandwidth. Furthermore, as Li et al. use the base layer (i.e. information that does not depend on the

network capacity) to measure the available bandwidth, one skilled in the art would have readily recognized that the bandwidth could also be measured by first sending text, i.e. the data that does not depend on the capacity of the network. The rationale for this combination would have been adapt the disclosure of Li et al. as modified to be used to display web page data at optimal speeds. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT HANCE whose telephone number is (571)270-5319. The examiner can normally be reached on M-F 8:00am - 5:00am EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, LunYi Lao can be reached on (571) 272-7671. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. H./
Examiner, Art Unit 4134

/LUN-YI LAO/
Supervisory Patent Examiner, Art Unit 4134